System Security Awareness For Transportation Employees

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What is the most common misconception about terrorism?

"It can't happen to me"

The answer is <u>it can</u>!

Homicide Bombings

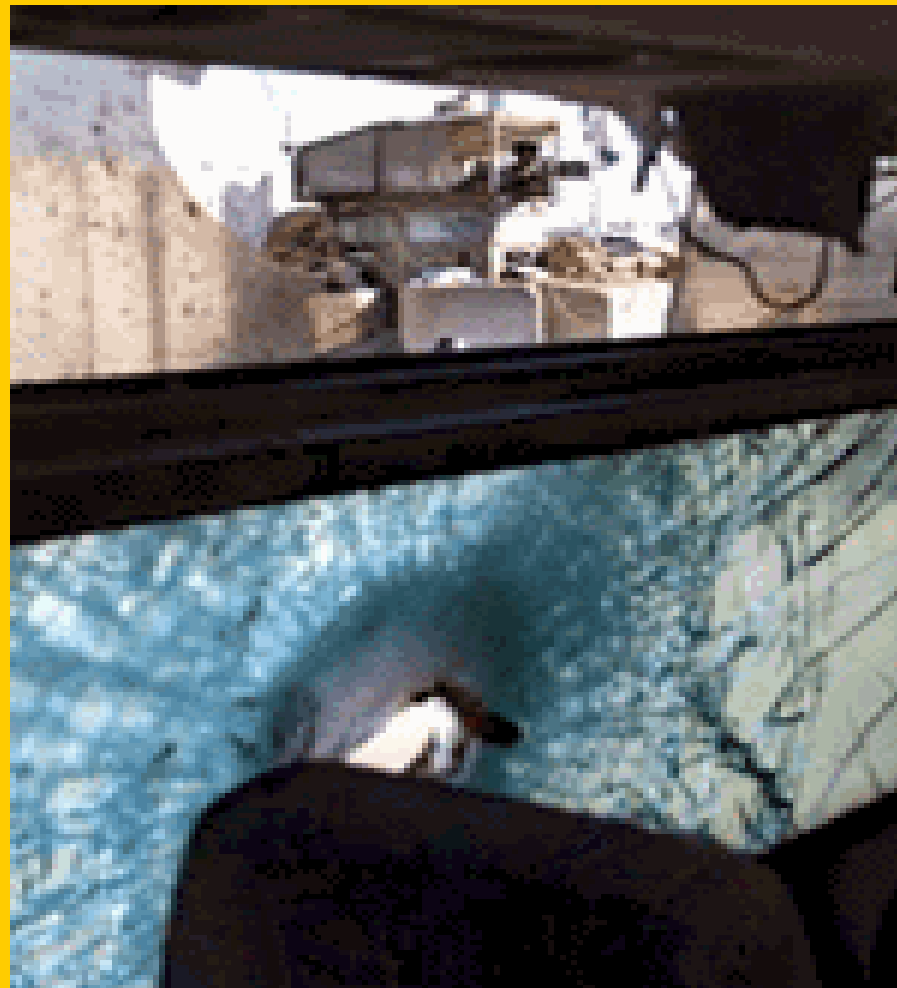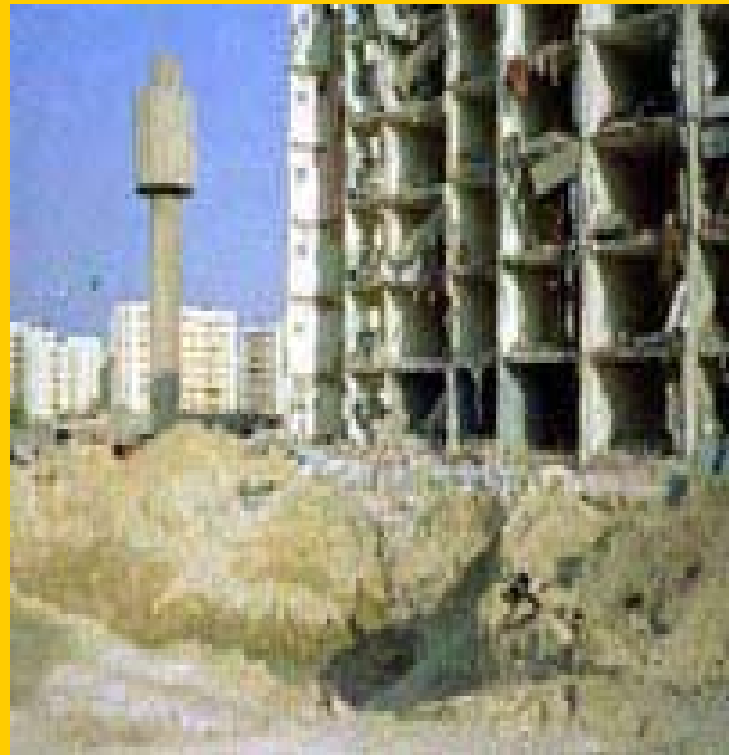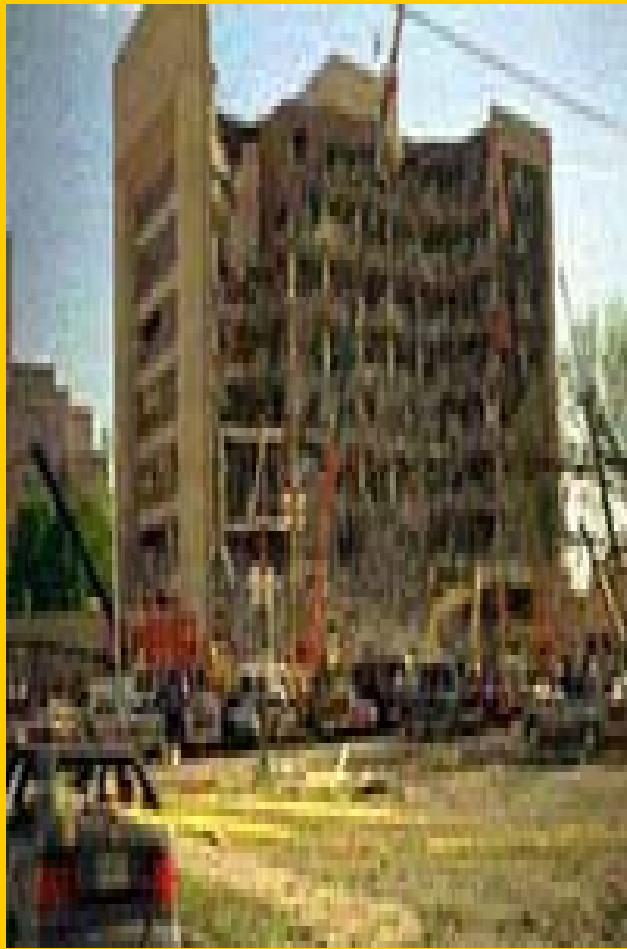**239 BOMBING INCIDENTS (May 2000 to May 2003)**

© Reuter

November 20
bombing of schoolbus
of Jewish children

Mass Destruction Bombings

Argentina Bus Bombing

History

- Chowchilla (California) Hijacking
- Zodiac Serial Killer (San Francisco Bay Area)
- 1984 Olympics (Los Angeles)
- Desert Sands Unified (California) Hijacking
- Centennial Olympic Park Bombing (Atlanta)
- School Shootings (Columbine High School)
- Bus Bombing (Israel, Spain, Columbia)
- World Trade Center (New York City)
- Sniper Killings (Washington DC, Virginia, Maryland)

Reports and Publications

- <u>Safe School Initiative</u> An Interim Report on the Prevention of Targeted Violence in Schools (U.S. Secret Service, U.S. Department of Education)

- <u>School Shooter: A Threat Assessment Perspective</u> (FBI)

- <u>On-Site Emergency Response Planning Guide</u> (National Safety Council)

- <u>Transit Workplace Safety and Security</u> (National Transit Institute, US DOT, US FTA, Rutgers University)

What is System Security?

System Security

- System Security is part of System Safety

- The use of operating principles to reduce the security vulnerabilities of a passenger transportation system to the lowest practical level

Characteristics of System Security

- Emphasizes prevention of crime and vandalism

- Uses data collection and analysis

- Focus on passengers, employees and property

Components of System Security

Risk

- Probability that a security incident will occur

Threat

- Any real or potential condition that can result in a security incident

Vulnerability

- Any condition or act that endangers human life or property

What is the Threat?

Terrorism

"The threat or use of force or violence to coerce a government or civilian population, in pursuit of political or social objectives"

Federal Bureau of Investigation

What is Terrorism on Passenger Transportation Systems?

Internationally, passenger transportation systems are a common target and American systems are vulnerable

• An attack on large groups of people

• A disruption of free movement

• A negative impact upon the economy

• An act to *Terrorize* the population

Who are the Terrorists?

Extremist groups

- Oklahoma City bombing

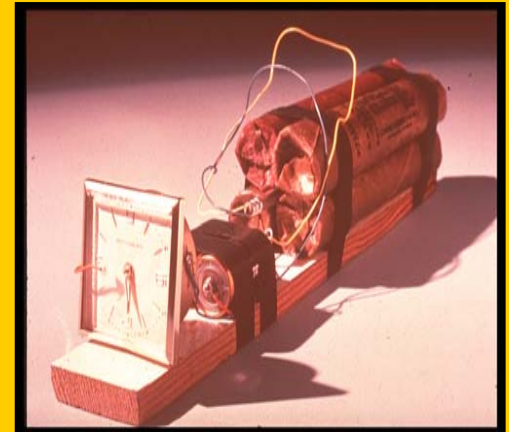**Foreign Terrorists**

- September 11 attacks

Individuals
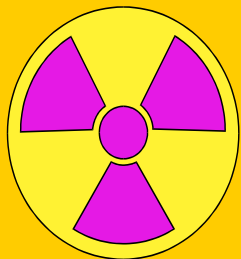
- Seattle bus hijacker

What are Terrorist Weapons?

Improvised Explosive Devices

Most commonly used

Chemical agents

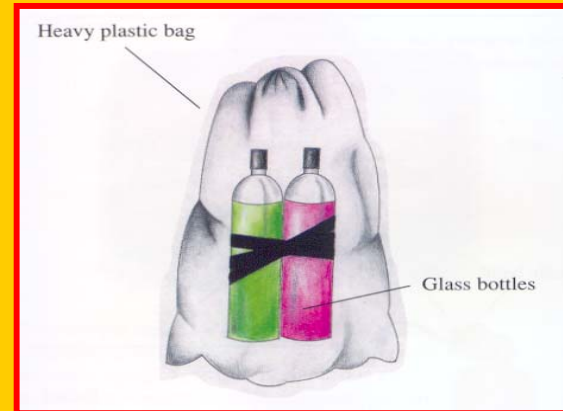Biological agents

Radiological agents

The Greatest Fear

Chemical,
Biological and
Radiological
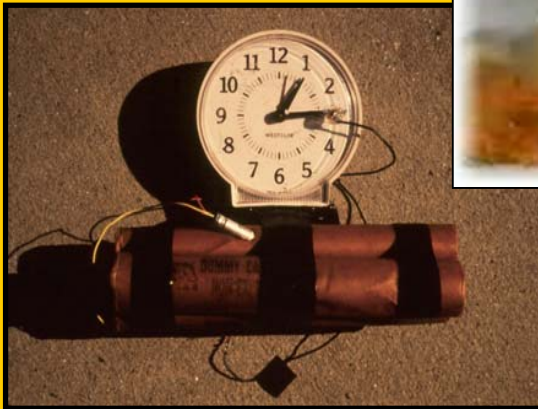Agents

Tokyo Chemical Attack

- Sarin attack in Tokyo subway
- 12 fatalities - 1,200 ill
- Dispersal devices (bags) found and moved by maintenance employee

Heavy plastic bag

Glass bottles

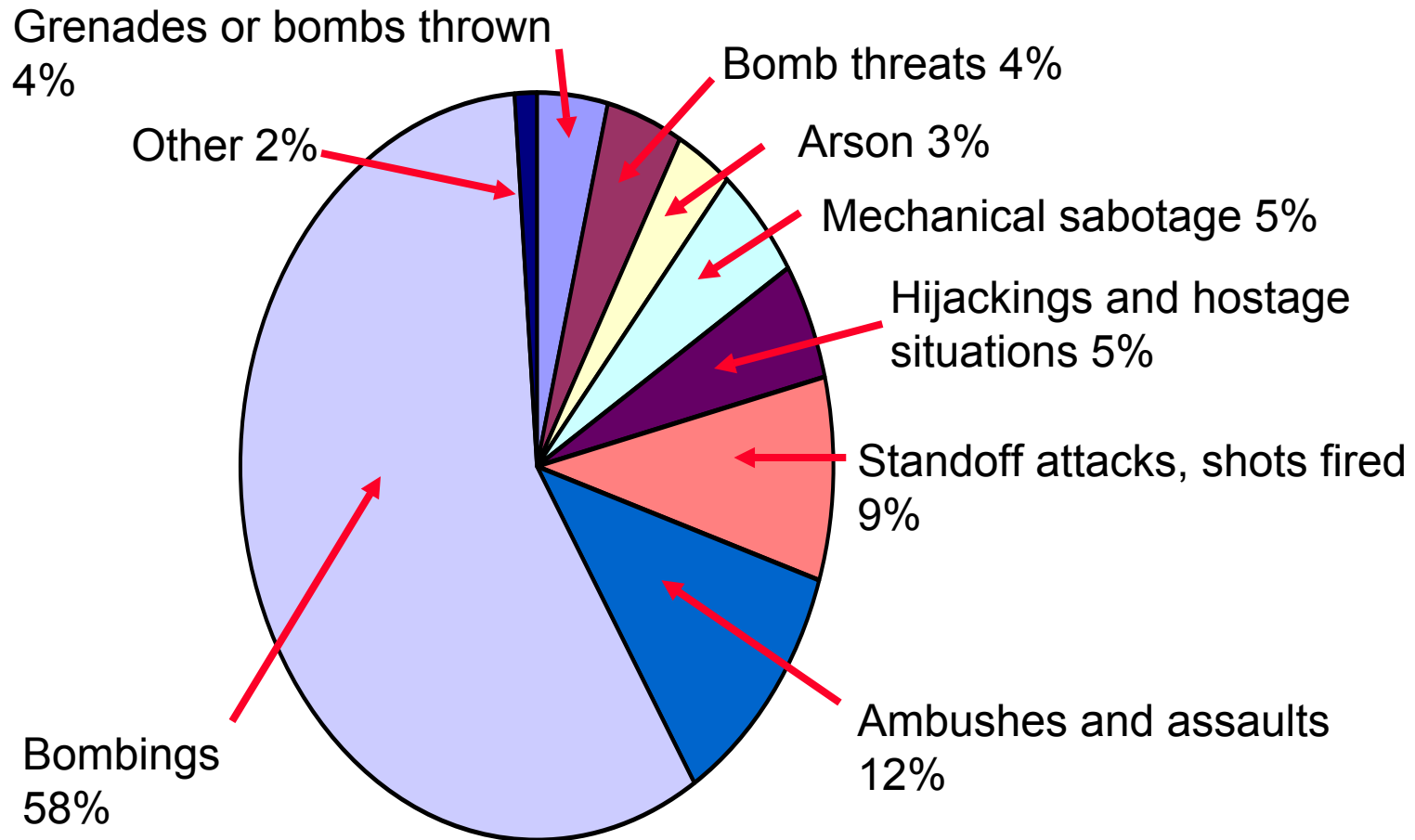# The Greatest Threat

Improvised
Explosive Devices

Bus Bombings

- 30 killed by bus bomb in Sri Lanka
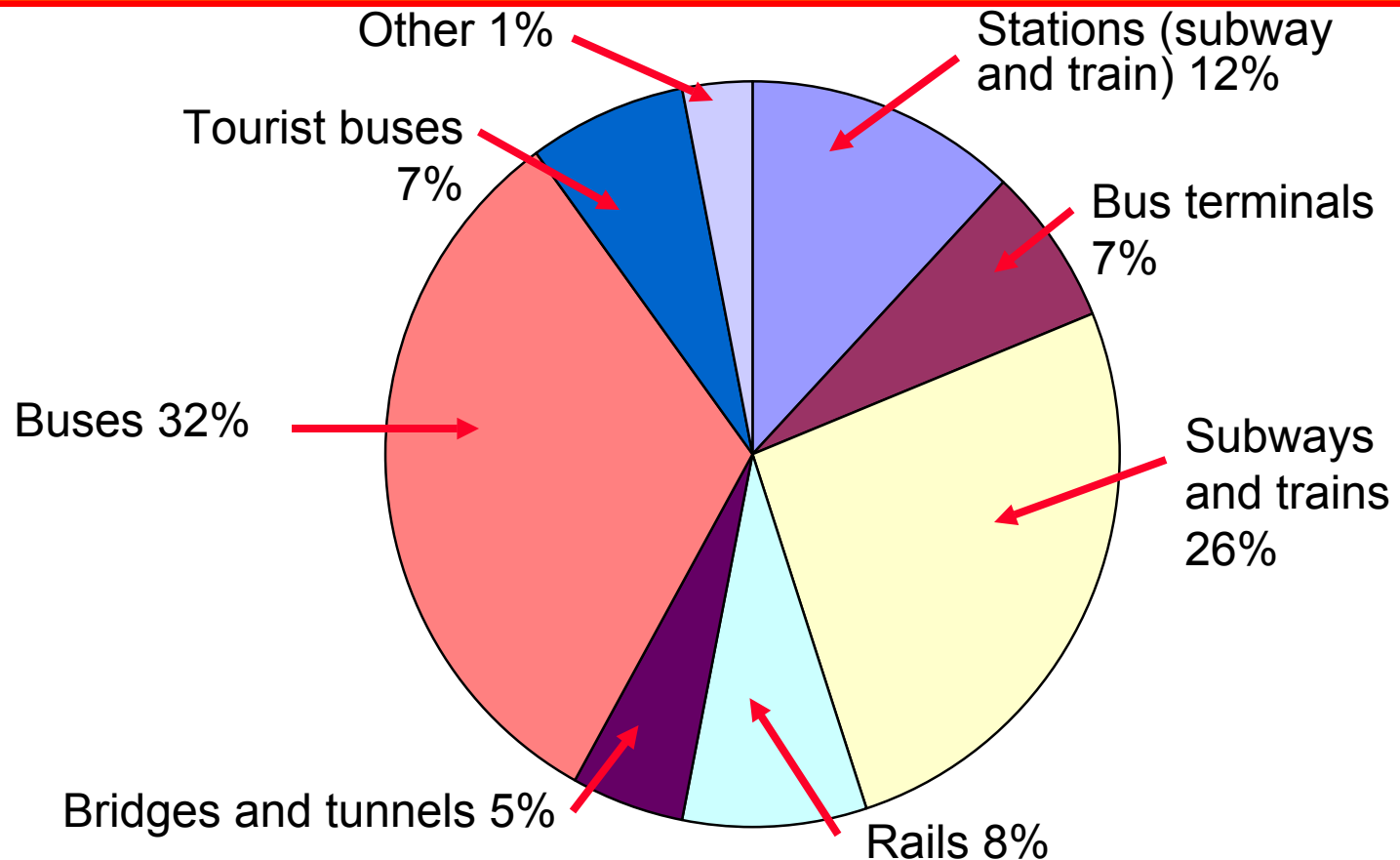
- Bomb on bus in central London kills one, injures eight

- Ten die in Israel bus bomb

- Light rail bombing kills nine and injures 60 in Manila

Attack Methods (1920-2000)

Grenades or bombs thrown 4%

Other 2%

Bomb threats 4%

Arson 3%

Mechanical sabotage 5%

Hijackings and hostage situations 5%

Standoff attacks, shots fired 9%

Bombings 58%

Ambushes and assaults 12%

International Mass Transit Targets (1920-2000)

Other 1%

Stations (subway and train) 12%

Tourist buses 7%

Bus terminals 7%

Buses 32%

Subways and trains 26%

Bridges and tunnels 5%

Rails 8%

The Effects on Passenger Transportation

- Incidents - injuries and casualties

- Interruption of operations

- Panic and confusion

- Evacuations

- Loss of ridership

Service

What is Your Role in Reducing Vulnerability?

How is Vulnerability Reduced?

- Vulnerability assessments

- Develop and implement security plans

- Policy enforcement

- Employee awareness training

- Employee alertness

SAFETY FIRST

DON'T TAKE CHANCES

Roles and Responsibilities

Front-Line Employee
– Observation and reporting

Supervisors
– Assessment and decision-making

Management
– System-wide safety and security planning

Neighborhood Watch Concept

- Those who work or live in an environment know it best

- Helping - not replacing traditional security measures

What is Your Role?

- Be alert, you are the Eyes, Ears…and Mouth of the agency

- Note suspicious people, activities, packages, devices and substances

- Report things that do not seem right

- Know the area

What Can You Do Now?

- Observe and report system weaknesses
- Follow procedures
- Practice good housekeeping
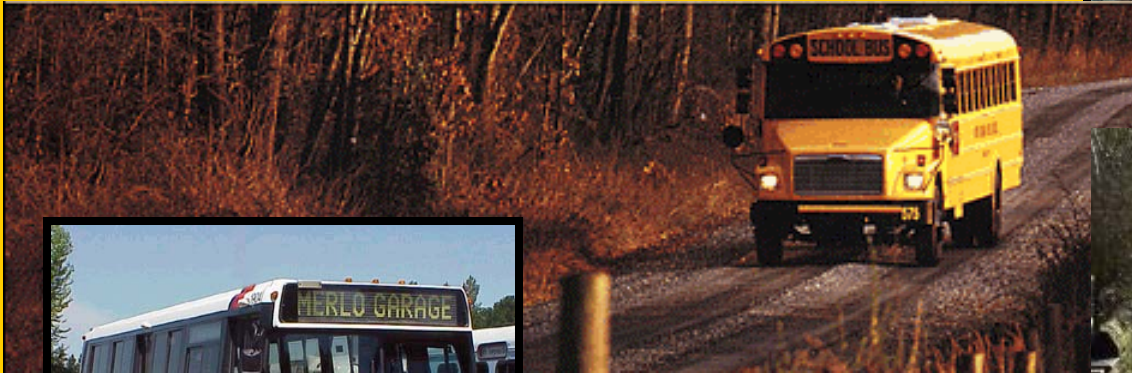- Question who and what is out-of-place

Be Proactive

Integrate *security sweeps* of vehicles and facilities into your daily routine

Security Measures for Bus Systems

What Does This Mean To You?

- **System security includes you**
  - Integrate security sweeps into your daily routines
- **Be prevention oriented**
  - Know your customers and your community
  - Know your operating environment
  - Practice good housekeeping
- **Use common sense**
  - Observe the situation
  - Report the unusual or unexplainable immediately

Security Measures for Bus Operations

Signs of vehicle tampering:

- Open or disturbed compartments or cabinets

- Unusually clean or dirty areas

- Items attached to vehicles or objects with magnets or duct tape
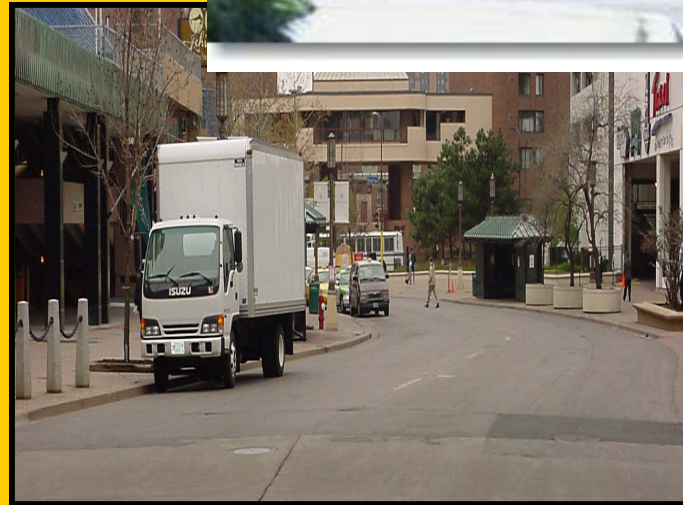
- Things that are *out-of-place*
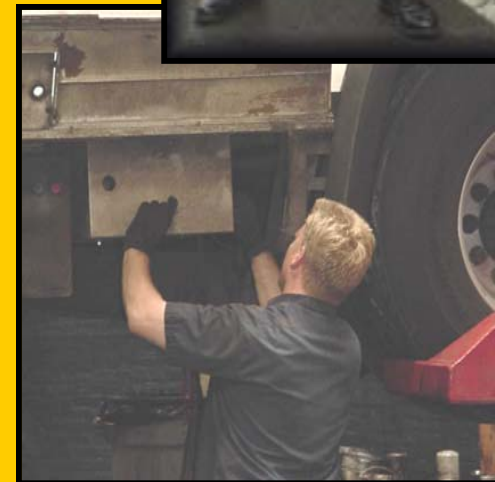
Security Measures for Bus Operations

Facilities

- Schools
- Garages/shops
- Park out locations

Bus routes/activity trip locations

- People
- Activity
- Suspicious vehicles

Security Measures for Bus Operators

Exterior Search

- Wheel wells
- Engine and other compartments
- Frame and underbody
- Exhaust
- Roofs of CNG buses
- Bike racks
- External lifts

Security Measures for Bus Operators

Interior Search

- Floors and compartments
- Above, on and below seats
- Operator's area
- Steps
- Internal lift

Security Measures for Bus Maintenance

Exterior Vehicle Search

- Frame and underbody
- Wheel wells
- Engine and other compartments
- Exhaust
- Fuel and air tanks
- Roofs of CNG buses
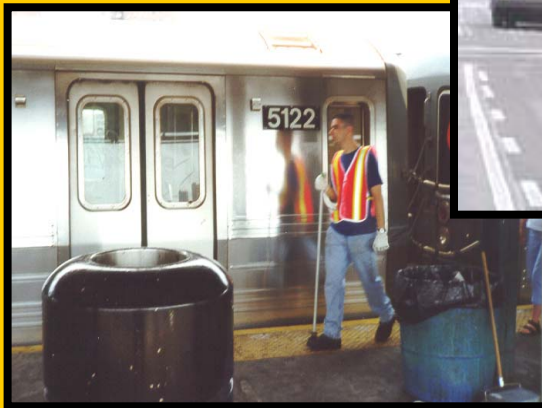- Additional wires from the battery

Security Measures for Bus Maintenance

Interior Vehicle Search

- Floors
- Seats and under seats
- Interior compartments
- Interior lights
- Operator's area
- Steps and lift

Security Measures for Transportation Facilities
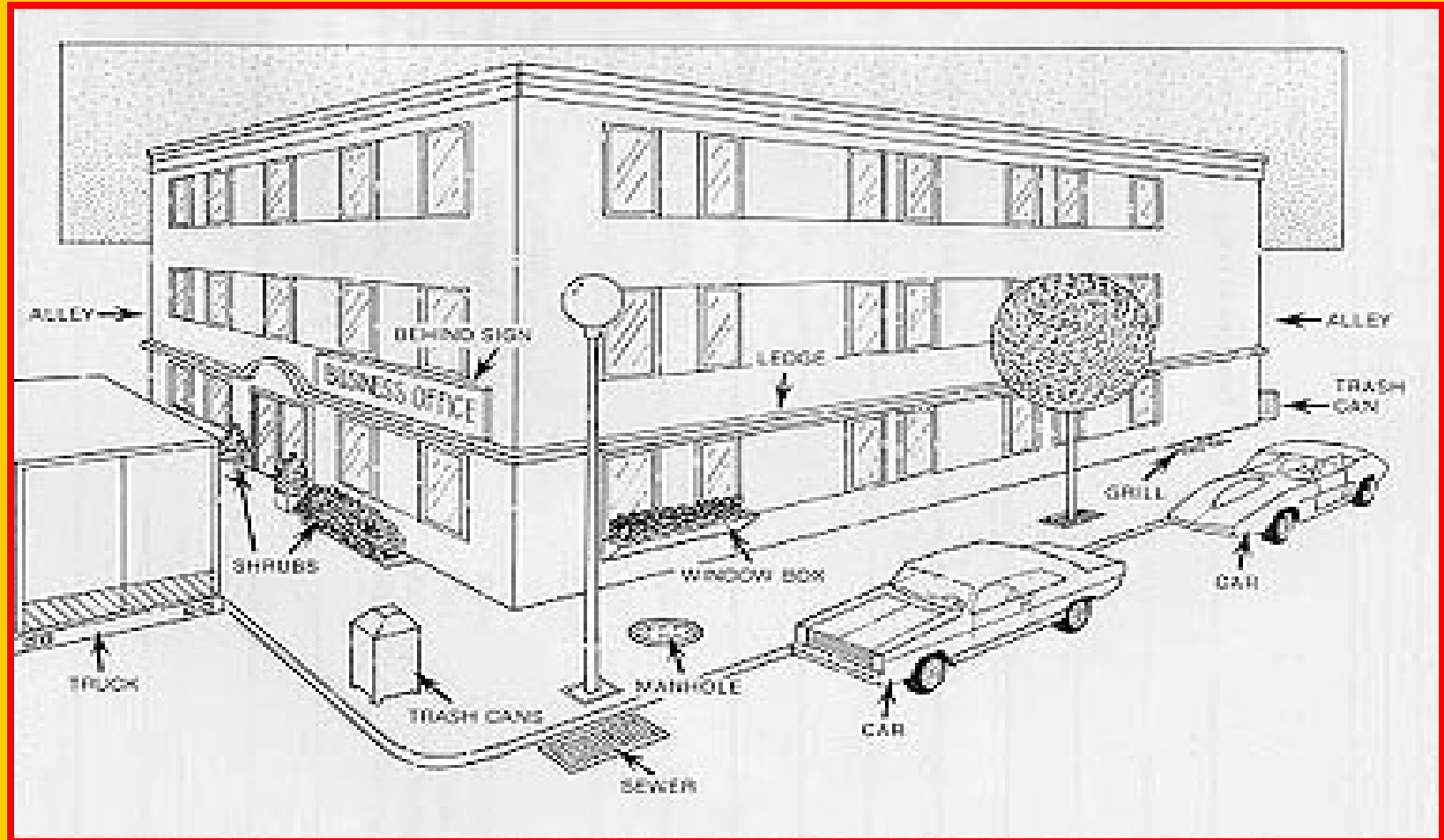
Security Measures for Facilities

Exterior Facility Search

- Shelters
- Trash collection points
- Light fixtures
- Fuel pads and storage tanks
- Parking lots - unidentified vehicles
- Sewers and drainage ditches
- Electrical cabinets and generators
- Shrubbery and ornamental fixtures
- Building ledges and overhangs

Exterior Facility Search

Security Measures for Facilities
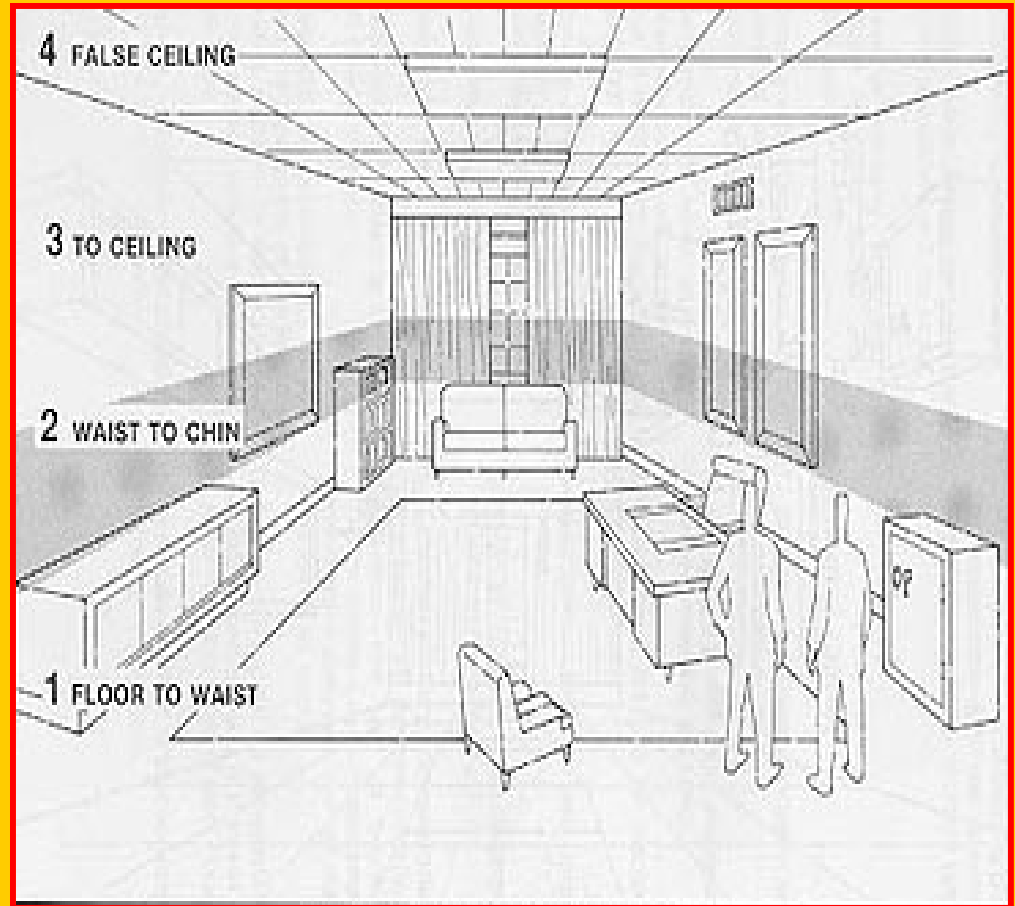
Interior Facility Search

- Lobbies and waiting areas
- Restrooms
- Telephone and utility rooms
- Cleaning and storage closets
- Maintenance shops and service bays
- Elevator shafts
- Idle and open spaces
- All rooms of a building

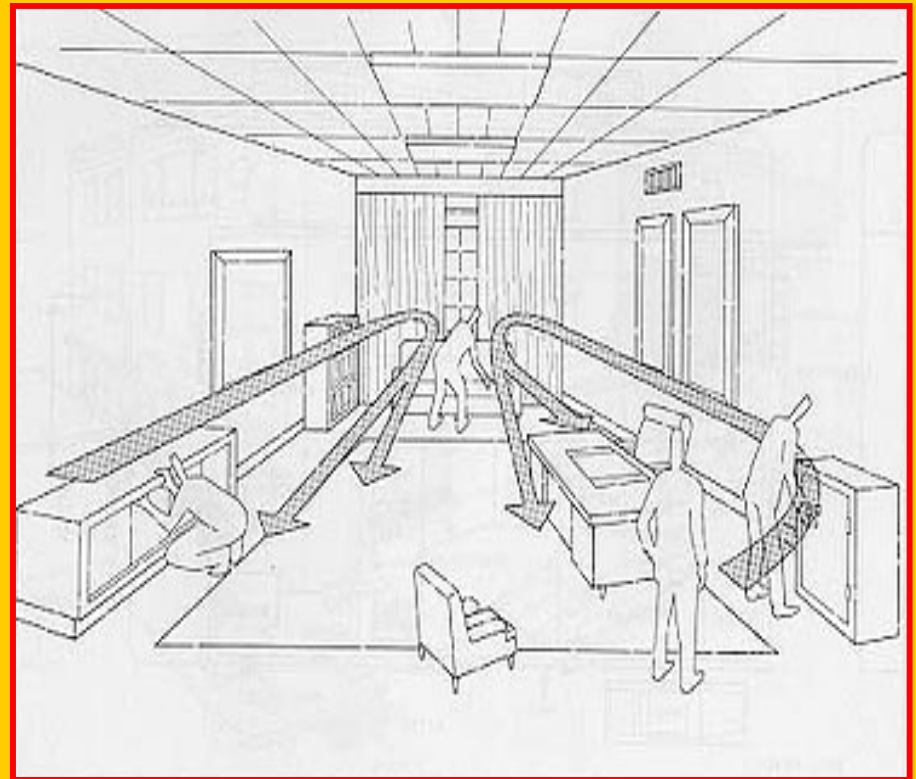# Interior Facility Search

- **Floor Level**
  - Trash receptacles
  - Water coolers
  - Vending machines
  - Room furniture
  - Sinks and other lavatory fixtures
  - Floor coverings

Interior Facility Search

- **Wall and Ceiling Level**
  - Cabinets and closets
  - Clocks and other wall fixtures
  - Light fixtures
  - Pay phones
  - Window coverings
  - Hung ceilings

What Do You Look For?

Suspicious People

A suspicious person is someone who is...

- In an unauthorized area
- In the wrong place or appears lost
- Overdressed for weather conditions
- Loitering, staring or watching employees and passengers
- Pacing, nervous or jumpy
- Acting in a disorderly manner, alarming or disturbing others

Suspicious People

- Repair personnel, utility crews, delivery persons or other "trusted employees" who are out of place

- People expressing an unusual level of interest in operations, personnel, equipment or facilities

- People who are on district or company property without a proper ID, uniform or safety gear

Focus on Behavior

Suspicion should be based upon:

- Where they are

- When they are there

- What they are doing

Suspicion should NOT be based upon:

- Race, color or ethnicity

Approaching People

Avoid

- Approaching threatening or dangerous persons

- Being confrontational, abusive or offensive

- Detaining or holding a person by any means

Check the area or areas in which they were seen for signs of tampering or suspicious packages, devices or substances

Approaching People

Calmly ask if you can help them

- Request an ID card or badge
- Question what their business is or whom they want to see
- Offer to escort them out of a restricted area

Make notification if there is no explanation for their presence

- Try to keep them in sight at all times
- Observe and report their location, activity, behavior and physical characteristics

Physical Characteristics

Eyes

Ears

Mouth/Nose

Hair/Facial Hair

Forehead

Cheeks/Chin

Neck

Complexion

Body Shape/Size

Hat

Jewelry

Shirt/Blouse/Dress

Coat

Pants/Skirt

Socks/Shoes

Oddities/Tattoos

General
Appearance

Accessories

Suspicious Activities

- Cars and other vehicles parked in strange locations

- Out-of-place vans, trucks, motorcycles, bicycles and cars

- A package abandoned by a person quickly leaving an area

- A person taking photos of facilities and equipment

Unattended Packages

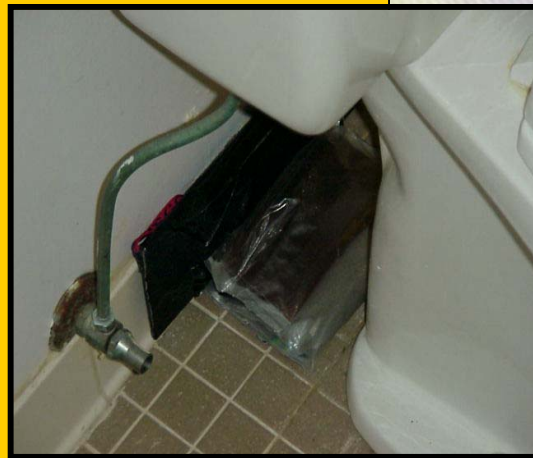**An unattended package is often one that is left...**

- On or next to a seat in a vehicle

- Next to a phone booth

- Next to a vending machine

- In a rest room

- In a waiting area

- On a station platform

Suspicious Packages

**A suspicious package is an unattended package that is...**

- Left or put in an out-of-the-way place (under or behind a seat, in or behind trash containers, etc.)

Suspicious Packages

A suspicious package is an unattended package that is...

- One that matches something described in a threat or has a threatening message attached
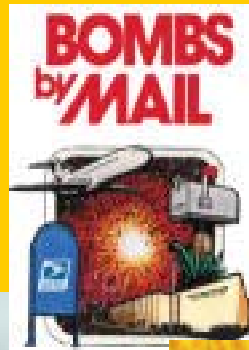- An out-of-place or abandoned container (fire extinguisher, propane canister, Thermos, etc.)
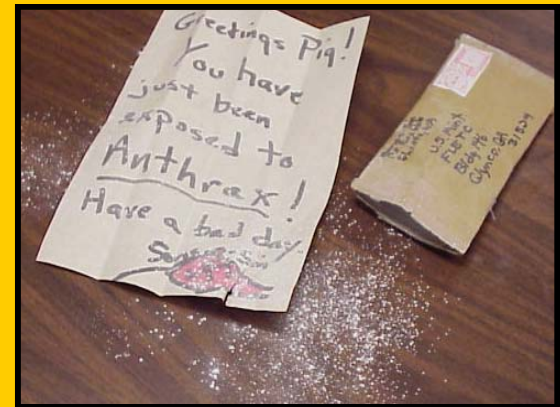
Suspicious Devices

A suspicious device is one with...

• Unusual wires or batteries visible

• Tanks, bottles or bags visible

• A clock or timer attached

BOMBS by MAIL

LETTER AND PACKAGE BOMB INDICATORS

RESTRICTIVE MARKINGS
MAILED FROM FOREIGN COUNTRY
EXCESSIVE POSTAGE
MISSPELLED WORDS
ADDRESSED TO TITLE ONLY
RIGID OR BULKY
WRONG TITLE WITH NAME
NO RETURN ADDRESS
BADLY TYPED OR WRITTEN
STRANGE ODOR
PROTRUDING WIRES
OILY STAINS ON WRAPPING
LOPSIDED
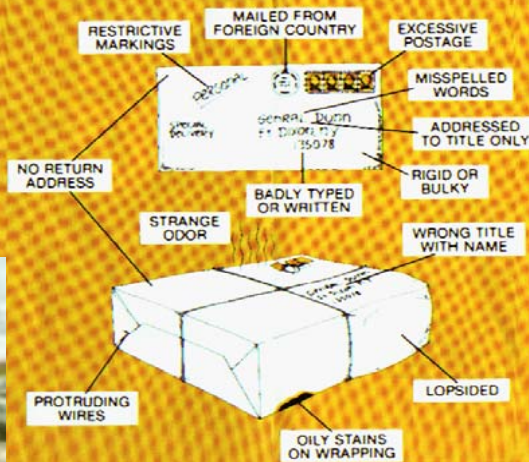
When Asked, Most People Think of Bombs in a Traditional Form

Improvised Explosive Devices

Most bombs assembled by terrorists are improvised explosive devices (IEDs)

- A controlled means of causing injury and damage to personnel and property
- A group of integrated components that provides a high velocity wave of pressure, fragmentation and high temperature gases when desired
- The purpose of most IEDs is to kill or maim
- Some IEDs, known as incendiaries, are intended to cause damage or destruction by fire
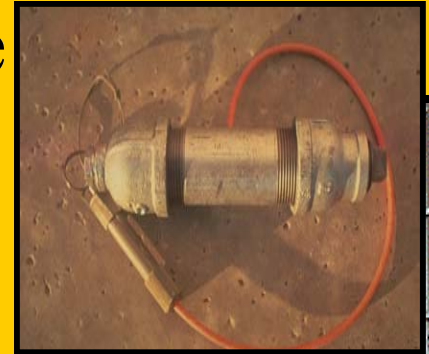
IED Components

Components

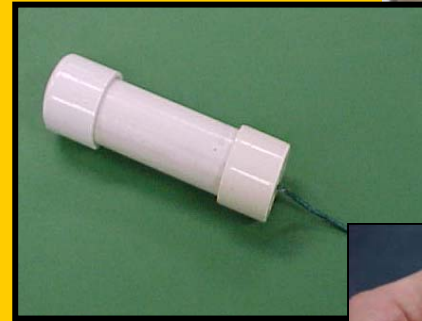Switch/Timer

Detonator/Initiator

Power Supply

Explosive Main Charge
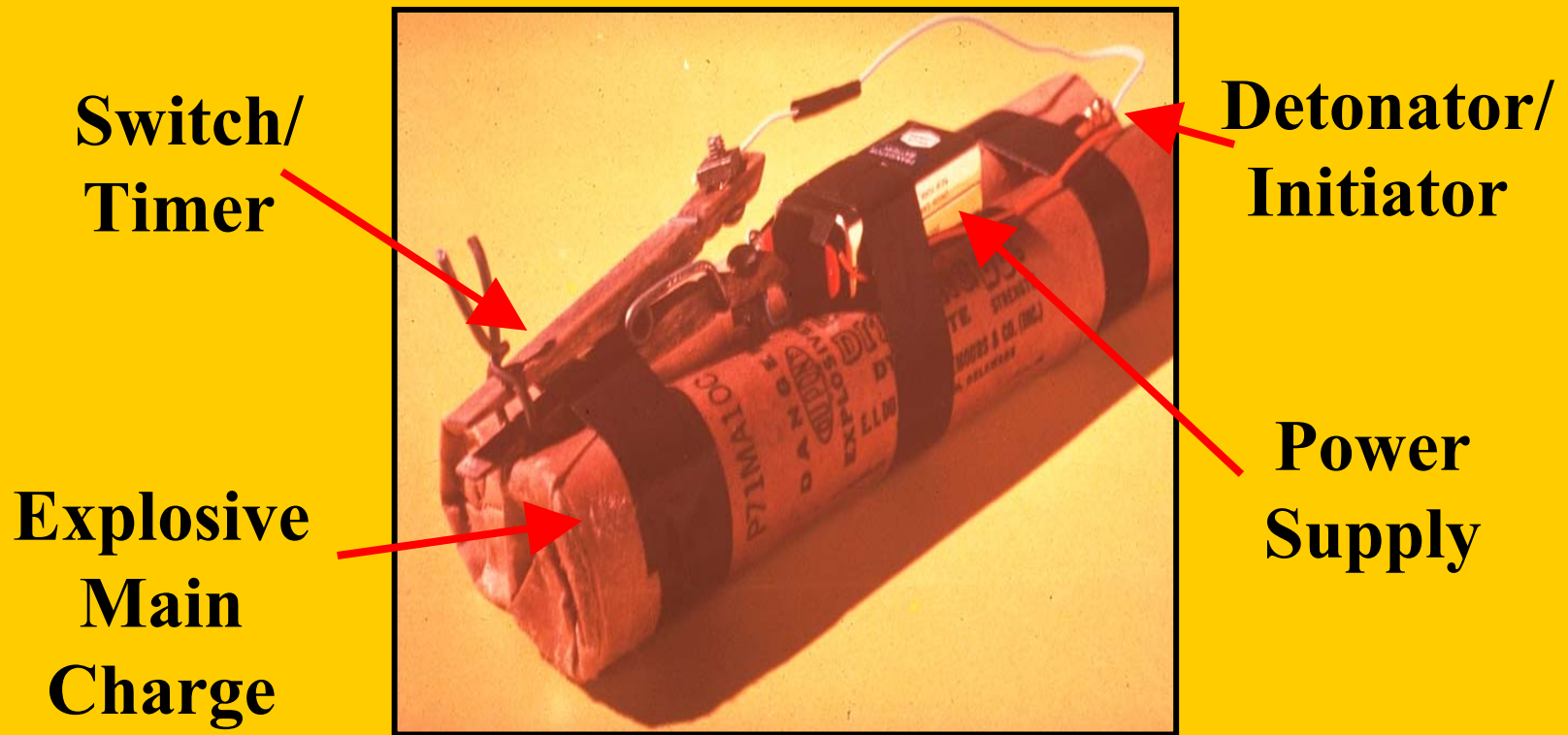
Pipe Bombs

- The most common type of terrorist IED
- Consists of an explosive inside a tightly capped piece of pipe
- Very easily made using gunpowder, iron, steel, PVC, aluminum or copper pipes

Pipe Bomb Construction

Improvised Explosive Devices

WARNING

- The effects are sometimes worsened by the addition of material such as nails, scrap iron or ball-bearings.
- Sometimes there is an anti-handling device that triggers the fuse when the IED is handled or moved.

Improvised Explosive Devices

- IED's can take many forms
  - Remote triggering components
  - Concealed power supplies

- Employee Actions
  - Do not touch, cover or move device
  - Make proper notification
  - Evacuate the area

Molotov Cocktail

- Simple to make
- Causes considerable damage
- Made from materials like gasoline, diesel fuel, kerosene, ethyl or methyl alcohol, lighter fluid and turpentine

Fuel Soaked Rag

Glass Bottle

Liquid Fuel

Classic Molotov Cocktail
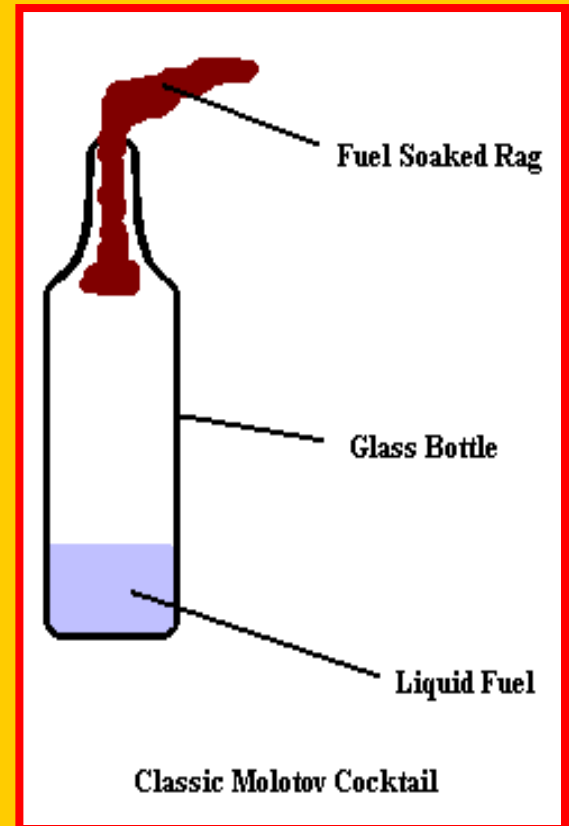
Effects of IEDs

- Three primary effects
  - Blast wave (over pressure)
  - Fragmentation (puncture)
  - Hot gases (burn)
- Blast wave from detonation
- Fragmentation from enclosure and added material
- Hot gases a product of detonation

Blast Effects

EXPLOSIVE	5	10	15	20	25	30	35	40
DEATH	17	34	51	69	86	103	120	137
BODILY INJURY	19	37	56	74	93	111	130	148
HEAD INJURY	23	45	68	90	113	135	158	180
LUNG INJURY	41	82	123	164	205	246	287	328
EARDRUM RUPTURE	119	238	357	476	595	714	833	952
HEARING LOSS	1640	3280	4920	6560	8200	9840	11,480	13,120

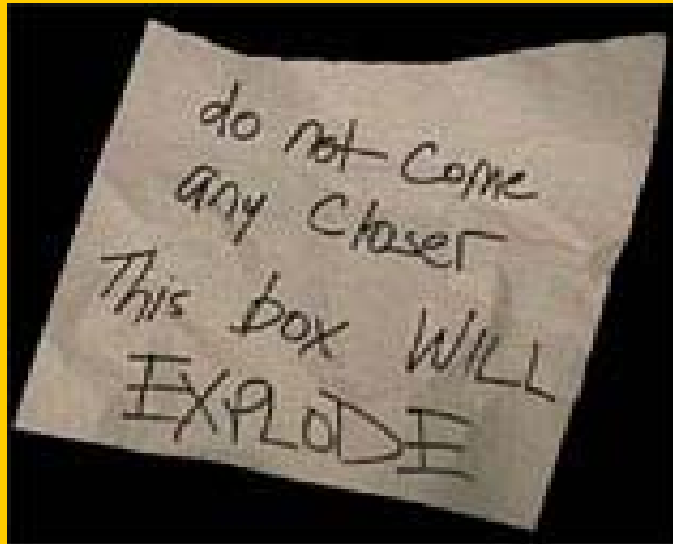# Blast Effects
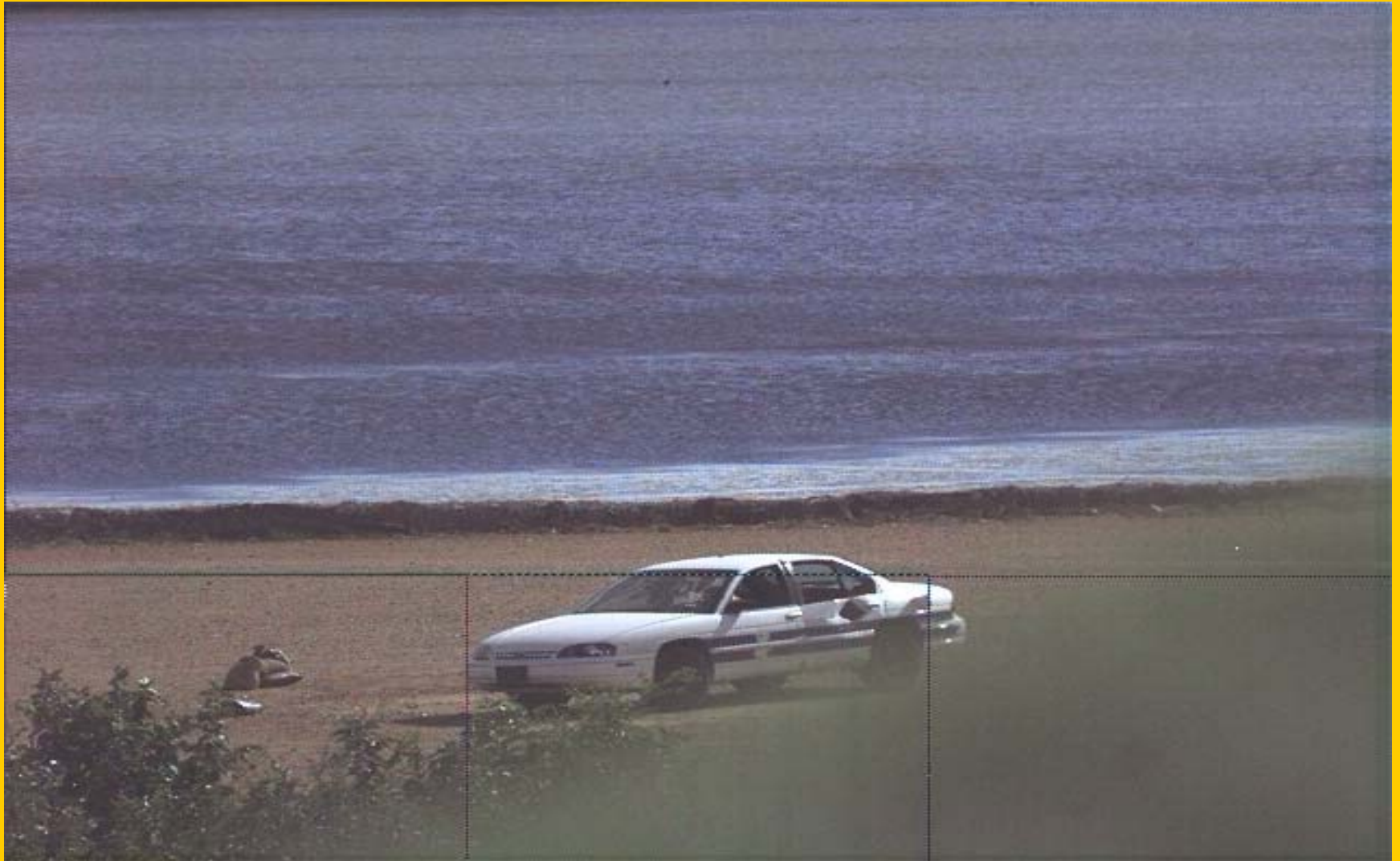
Blast Effects

Centennial Olympic Park Bomb

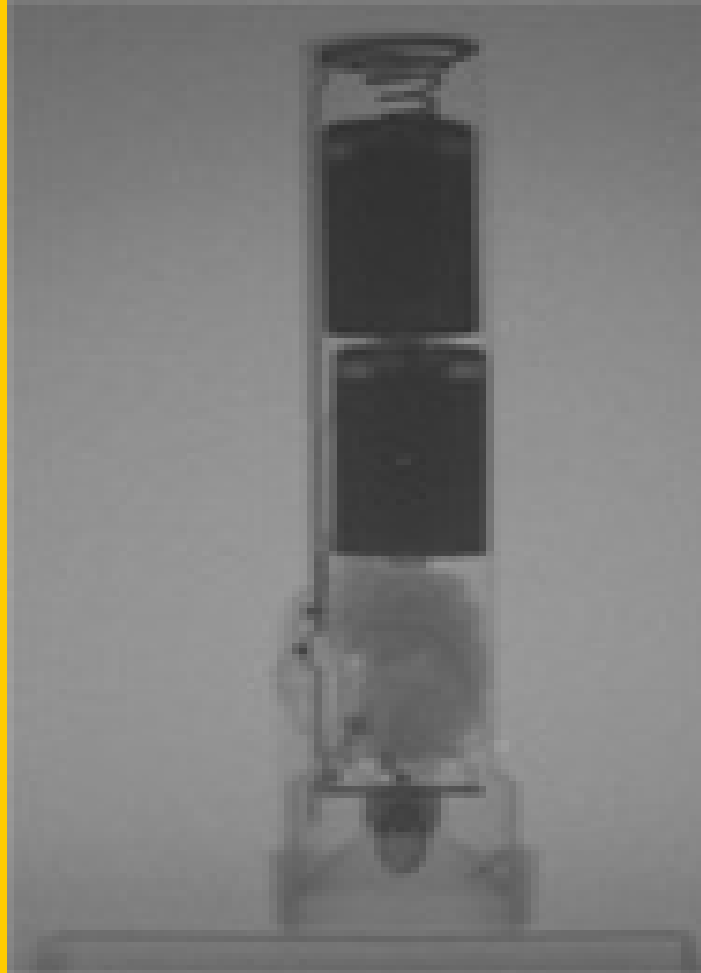

CENTENNIAL OLYMPIC PARK

July 27, 1996

Booby Trap

Flash Light Bomb

IED Found on California School Bus

- Water bottle containing Hydrochloric Acid (HCL)

- Ball of aluminum foil

- HCL and aluminum foil separated by layer of candle wax

Hydrochloric Acid HCL (Muriatic or Chlorohydric Acid)

- Appearance: clear colorless or slightly yellow with pungent odor.

- Toxicology: Extremely corrosive, care should be taken to prevent contact with metals which could cause the release of flammable hydrogen gas and toxic or corrosive fumes.

- Risks: Inhalation of vapor can cause serious or fatal injury. Ingestion may be fatal. Causes burns, irritating to eyes, skin and respitory system.

TSA Alert

- Transportation Safety Administration of the U.S. Department of Homeland Security

- The national threat level has been raised from "ELEVATED" (Yellow) to "HIGH" (Orange). This is based on specific intelligence received and analyzed by the full U.S. Intelligence Community.

- Recipients are reminded to remain alert to the potential for such targeting. Information on suspicious activity possibly related to such targeting should be reported immediately to the nearest FBI Joint Terrorism Task Force (JTTF) or local FBI field office. State and local law enforcement are encouraged to discuss appropriate measures for their respective communities with their designated JTTF.

- Modal authorities and infrastructure owners and operators are recommended to evaluate current security procedures and apply, as appropriate, the following protective measures that correspond to Threat Condition HIGH (Orange) under the Homeland Security Advisory System:

Class Exercise

Threat Assessment

- Stolen bus?
- Stolen or missing uniforms?
- Stolen or missing ID badges?
- Doors, or gates unexplainably left open?
- Employee making threats against government officials?
- Driver applicants ask suspicious questions during training?
- Vehicles following school bus routes?

Industry Recommendations

- Training on system security and awareness
- Create a reference book for law enforcement (Yellow Book) with descriptions, diagrams and data on existing school buses
- Emergency incident lamps
- Roof identification numbers
- GPS monitoring systems (Lojack)
- Outside handle on roof hatches
- Secure entrance doors

State Action Plan

- Training, (drivers, school administrators, law enforcement

- Require school safety plans include transportation

- Notification system for alerts, threat conditions and advisories

- Programs to assist law enforcement

- Equipment requirements

- The public's assistance and awareness

Incident Reporting

- Report potential security concerns or incidents to local law enforcement, and FBI.

- Transportation Security Administration's (TSA) new 24 hour Transportation Security Coordination Center (TSCC) at,

703-563-3236/7

California Incident Reporting

- Contact the California Anti-Terrorism Information Center (CATIC) at,

888-834-8200

Information Web Sites

- U.S. Department of Education School Plans for Emergencies www.ed.gov/emergencyplan
- U.S. Department of Homeland Security www.ready.gov
- Federal Bureau of Investigation (FBI) www.fbi.gov/contact
- National Infrastructure Protection Center (NIPC) www.nipc.gov/incident/cirr

The Big Question?

- Why haven't we had a terrorist attack on a school bus in the United States?

Questions!